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EXAMINER

BLEVINS, JERRY M

ART UNIT

PAPER NUMBER

2883

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Please find below and/or attached an Office communication concerning this application or proceeding.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed February 17, 2006 have been fully considered but they are not persuasive.

Regarding applicant's arguments concerning claims 2, 5, 8, 9, 11, and 21, namely, that neither the applied reference to Story, US Patent 4,898,451, nor the applied reference to Zopf et al., US Patent 6,208,790, suggests a single cable comprising both transparent or translucent and color-coded buffer tubes, examiner points out that the original rejection of the claims with this limitation was a 35 U.S.C. 103(a) obvious-type rejection. Although, neither Story nor Zopf individually teach a single cable comprising both transparent or translucent and color-coded buffer tubes, the combination of the references would yield this limitation obvious. Namely, Story teaches color-coded buffer tubes, whereas Zopf teaches transparent buffer tubes, each of which are used for the identification of the buffer tubes and of the individual optical fibers therein (see rejections below). Examiner maintains that the above claimed limitation would have been an obvious combination of the teachings of Story in view of the teachings of Zopf. Further in response to applicant's arguments against the references individually, examiner points out that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding applicant's arguments concerning claims 10, 17, and 18, examiner maintains that Story does suggest using a different color filling material for each buffer tube, since Story discloses that the underlying purpose for using the color filling material is for identification of the buffer tubes and to the individual optical fibers therein (column 2, lines 4-52). This purpose can only be achieved if a different color filling material is used for each buffer tube, since two buffer tubes filled with the same color filling material would be confused and not easily identifiable.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 5, 10, 17, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Story in view of Zopf.

Regarding claim 2, Story teaches a cable, comprising a plurality of buffer tubes, wherein each buffer tube of the plurality contains a colored filling material (Figure 2 and column 2, lines 27-52). Story also teaches that the colored filling material is color-coded (abstract and column 2, lines 3-26). Story also teaches that the buffer tubes are color-coded (abstract and column 2, lines 3-26). Story does not teach non-color-coded filling material and transparent buffer tubes, wherein the non-color coded filling material is disposed within the color-coded buffer tubes and the color-coded filling material is

disposed within the transparent or translucent buffer tubes. Zopf teaches non-color-coded filling material and transparent buffer tubes, wherein non-color-coded filling materials can be disposed within color-coded buffer tubes and color-coded material can be disposed within transparent buffer tubes (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Story with the teachings of Zopf. The motivation would have been to increase the number of individually identifiable fibers used in the cable.

Regarding claim 5, Story in view of Zopf teaches the limitations of the base claim 4. Story also teaches color-coded fibers (column 1, lines 5-28).

Regarding claim 10, Story teaches a cable comprising a plurality of buffer tubes; a plurality of color-coded optical fibers within each buffer tube, and color-coded filling material disposed within each buffer tube wherein each buffer tube contains a different color of filling material (Figure 2, abstract, and column 2, lines 3-52). Story does not teach that the buffer tubes are transparent or translucent. Zopf teaches a transparent buffer tube (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the transparent buffer tube of Zopf in the cable of Story. The motivation would have been to increase visibility of the colored filling material and thereby improve the color-coding of the individual buffer tubes.

Regarding claim 17, Story teaches a system for identifying optical fibers comprising a plurality of buffer tubes; color-coded optical fibers, and color-coded filling

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material disposed within at least one of the buffer tubes (Figure 2, abstract, and column 2, lines 3-52). Story also teaches that each buffer tube contains a different color of filling material (Figure 2, abstract, and column 2, lines 3-52). Story does not teach that the buffer tubes are transparent or translucent. Zopf teaches a transparent buffer tube (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the transparent buffer tube of Zopf in the cable of Story. The motivation would have been to increase visibility of the colored filling material and thereby improve the color-coding of the individual buffer tubes.

Regarding claim 18, Story in view of Zopf teaches the limitations of the base claim 17. Story also teaches a plurality of color-coded buffer tubes (abstract and column 2, lines 3-26). Story does not teach non-color-coded filling material disposed within the color-coded buffer tubes. Zopf teaches non-color-coded filling material and transparent buffer tubes, wherein non-color-coded filling materials can be disposed within color-coded buffer tubes and color-coded material can be disposed within transparent buffer tubes column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Story with the teachings of Zopf. The motivation would have been to increase the number of individually identifiable fibers used in the cable.

Regarding claim 21, Story teaches a method for identifying or managing optical fibers in a cable, comprising: color-coding optical fibers; color-coding filling material; and

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including the filling material in at least one buffer tube (Figure 2, abstract, and column 2, lines 3-52). Story does not teach that the buffer tube is transparent or translucent. Zopf teaches a transparent buffer tube (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the transparent buffer tube of Zopf in the method of Story. The motivation would have been to increase visibility of the colored filling material and thereby improve the color-coding of the individual buffer tubes. Story also does not teach non-color-coded filling material in color-coded buffer tubes. Zopf teaches non-color-coded filling material in color-coded buffer tubes (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Story with the teachings of Zopf. The motivation would have been to increase the number of individually identifiable fibers used in the cable.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Story in view of Zopf as applied to claim 2 above, and further in view of US Patent to Yamasaki et al., number 6,661,956.

Regarding claim 8, Story in view of Zopf teaches the limitations of the base claim 2. Story does not teach that the cable complies with EIA/TIA-598. Yamasaki teaches a cable which complies with EIA/TIA-598 (column 4, line 62 – column 5, line 32). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify

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Story with the EIA/TIA-598 compliant cable of Yamasaki. The motivation would have been to improve the identification of the fibers by standardizing the color-coding.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Story in view of Zopf and further in view of Yamasaki as applied to claim 8 above, and further in view of US Patent to Blew, number 5,345,526.

Regarding claim 9, Story in view of Zopf and further in view of Yamasaki teaches the limitations of the base claim 8. Story does not teach up to 288 optical fibers, wherein each fiber is individually identifiable. Blew teaches a cable comprising up to 288 individually identifiable fibers (column 5, lines 49-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide up to 288 individually identifiable fibers, as taught by Blew, in the cable of Story. The motivation would have been to increase the number of individually identifiable fibers in the cable.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Story in view of Zopf and Yamasaki.

Regarding claim 11, Story teaches a system for identifying buffer tubes, comprising: a plurality of buffer tubes; and a color-coded filling material. Story does not teach that the buffer tubes are transparent or translucent. Zopf teaches a transparent buffer tube (column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the transparent buffer tube of Zopf in the cable (system) of Story. The

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motivation would have been to increase visibility of the colored filling material and thereby improve the color-coding of the individual buffer tubes. Story also does not teach at least one ring, band marking, stripe, or identification thread/tape for at least one buffer tube. Yamasaki teaches buffer tubes with identification stripes (rings or bands) and tape (column 3, lines 36-67 and column 4, line 62 – column 5, line 59). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the identification stripes (rings or bands) and tape of Yamasaki in at least one buffer tube of Story. The motivation would have been to increase the number of individually identifiable buffer tubes. Story also teaches color-coded buffer tubes (abstract and column 2, lines 3-26). Story does not teach non-color-coded filling material and transparent buffer tubes, wherein the non-color coded filling material is disposed within the color-coded buffer tubes and the color-coded filling material is disposed within the transparent or translucent buffer tubes. Zopf teaches non-color-coded filling material and transparent buffer tubes, wherein non-color-coded filling materials can be disposed within color-coded buffer tubes and color-coded material can be disposed within transparent buffer tubes column 3, lines 32-42 and 53-61 and column 4, line 60 – column 5, line 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Story with the teachings of Zopf. The motivation would have been to increase the number of individually identifiable fibers used in the cable.

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB


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